

## Video output

Number/signal type .....	1 VGA/SVGA/XGA/SXGA RGBHV, RGBS, RGsB, RsGsBs
Connectors .....	1 15-pin HD female
Minimum/maximum levels .....	Analog ..... 0.3V to 1.5V p-p with no offset at unity gain
Impedance .....	75 ohms
DC offset .....	±5mV maximum with input at 0 offset

**NOTE** *Output resolution may vary depending on whether the P/2 DA1 is attached to the computer at startup, and on the type of computer you are using.*

## Sync

Input type .....	RGBHV, RGBS, RGsB, RsGsBs
Output type .....	RGBHV, RGBS, RGsB, RsGsBs
Input level .....	2.0V to 5.0V p-p
Output level .....	TTL ..... 5V p-p
Input impedance .....	510 ohms
Output impedance .....	75 ohms
Max. propagation delay .....	18.8 nS
Max. rise/fall time .....	4 nS
Polarity .....	Positive or negative

## General

Power .....	USB (5.0VDC, less than 200 mA)
Temperature/humidity .....	Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, non-condensing Operating +32° to +122°F (0° to +50°C) / 10% to 90%, non-condensing
Rack mount .....	No
Enclosure type .....	Plastic clamshell
Enclosure dimensions .....	0.56" H x 1.25" W x 3.0" D 1.4 cm H x 3.2 cm W x 7.6 cm D
Shipping weight .....	1 lb. (0.5 kg)
Vibration .....	ISTA/NSTA 1A in carton (International Safe Transit Association)
Approvals .....	CE, UL, CUL
MTBF .....	30,000 hours
Warranty .....	2 years parts and labor

## Part Number

P/2 DA1 USB .....	60-319-03
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**NOTE** *Specifications are subject to change without notice.*

# Extron® Electronics

INTERFACING, SWITCHING AND DISTRIBUTION



## User's Guide



## P/2 DA1 USB VGA Line Driver



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Installation

The Extron P/2 DA1 USB is a one input, one output VGA line driver. It boosts the video signal between a laptop or desktop computer (input device) and a monitor or large screen projector (output device).

Features

- The P/2 DA1 USB accepts and outputs SVGA, VGA, XGA RGBHV, RGBS, RGsB, and RsGsBs signals.
- The gain/peaking switch increases video signal voltage to compensate for signal degradation caused by long cables.

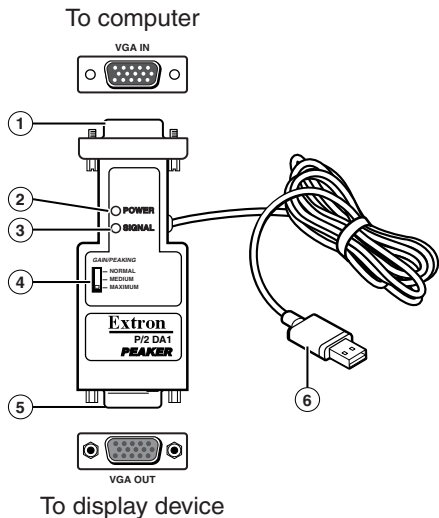
Installation

To install the P/2 DA1 USB, do the following:

1. Turn off power to the input and output devices, and unplug their power cords.
2. Connect the computer to the 15-pin HD male input connector (see ① in the “Operation” illustration below).
3. Connect the output device to the 15-pin HD female output connector (see ⑤ in the “Operation” illustration below).
4. Plug the P/2 DA1 USB’s power connector into the computer’s USB port.
5. Reattach power cords, and apply power to the the input and output devices.

**NOTE** Many laptop computers have an external video port, but they require special commands to output the video to that connector. Also, many laptops’ screens shut off after the port is activated. See the computer’s user’s guide for details, or contact Extron for a list of laptop keyboard commands.

Operation



- ① **15-pin HD input connector (male)**
- ② **Power LED** — Lights to indicate that the P/2 DA1 USB is on.
- ③ **Signal LED** — Lights to indicate that an input signal is being received.
- ④ **Gain/peaking switch** — Compensates for cable resistance and capacitance.

**Normal** — Output is the same level as input.

**Medium** — 50% of the total gain is applied. Peaking is applied.

**Maximum** — 100% of the total gain is applied. Peaking is applied.

**NOTE** If the signal cable between the P/2 DA1 USB and the output device is shorter than approximately 125 feet, and the gain switch is set 50% or 100%, the image may be overcompensated. If the edges of the image seem to exceed their boundaries, or if thin lines and sharp edges look thick and fuzzy, try changing the gain/peaking setting.

- ⑤ **15-pin HD output connector (female)**
- ⑥ **USB power connector** — Plug this into a computer’s USB port to provide power to the P/2 DA1 USB.

Specifications

Video

Gain .....	Selectable: .. Unity (Normal), (0.75V) 50% (Medium), (0.8V) 100% (Maximum)
Bandwidth .....	300 MHz (-3dB) Note: ID bits will be passed through

Video input

Number/signal type .....	1 VGA/SVGA/XGA/SXGA RGBHV, RGBS, RGsB, RsGsBs
Connectors .....	1 15-pin male
Minimum/maximum levels .....	Analog ..... 0.3V to 1.5V p-p with no offset at unity gain
Impedance .....	75 ohms
Horizontal frequency .....	15 kHz to 135 kHz
Vertical frequency .....	30 Hz to 170 Hz
Maximum DC offset .....	200mV